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A Survey on the Performance of Hospitals of Qazvin Province by the Pabon Lasso Model

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Abstract

Significant advances in knowledge and technology, and also enhanced level of awareness in people have increased the need to ideal-quality services. In addition, since hospital expenses are high, monitoring hospitals' efficiency in offering services is of much importance. Therefore, the purpose of this study is to evaluate the performance of hospitals of Qazvin Province using Pabon Lasso Model. This descriptive, analytical and applied study was conducted in 2013 and all the eleven hospitals of Qazvin province selected by census sampling. Required data related to four consecutive years (2009-2012) were analysed by using SPSS-20 software after being collected. Fisher's test has been used to determine independency of variables. The results of the studies showed that average rate of bed occupancy, bed turnover rate and length of stay for the studied hospitals were 82.32, 69.04, and 4.2 respectively. Finally after drawing Pabon Lasso diagram, it was found that 0% of hospitals are in the first area, 9% in the second, 82% in the third, and 9% in the fourth area of Pabon Lasso diagram. Fisher's exact test indicated that significance level of independency test between the type of the hospital ownership and hospital efficiency is 0.77, and between the type of specialized services of the hospital and its efficiency is 0.76.Despite the obtained results (placing of 82% of hospitals in the third area (the ideal area)), it should be stated that during the studied years, no significant change has been observed in the performance of the studied hospitals regarding improving their efficiency (moving toward northeast of the diagram).For this reason, it is expected that in order to find the underlying reasons of this lack of improvement and also to plan for more advances in future years, some essential actions should be taken.

Keywords: Bed occupancy rate, bed turnover rate, average length of stay, performance evaluation, Pabon Lasso diagram.

Introduction

Despite all significant and undeniable advances in science and technology, some inadequacies and challenges can be observed in Health and Treatment Center[1]. Among all, we can refer to inefficiency and non-satisfied expectations of patients as constant threats to this system[2]. Public hospitals constitute the main part of health and treatment system of developing countries, and devote 50% of costs of health and treatment systems to themselves[3,4]. Aging of population and spread of non-communicable diseases, and also the increase in costs of diagnostic and treatment services have led to growing demand for services, particularly in public hospitals. As a result, evaluation of these centers and allocation of resources based on their efficiency have gained more importance than ever[7-5].

Evaluating performance provides useful information for managers in order to monitor and assess the status quo and the performance of hospitals[8]. Evaluation, which is used as a process for assessing efficiency of pre-determined plans, requires specific tools and patterns. Different models have been introduced for evaluating the performance of organizations which offer health and treatment services, each of which has its own features. One of the models that is applied nowadays based on the necessity of considering efficiency principle in optimal utilization of resources is evaluation of performance using hospital efficiency indicators[9,10].

Efficiency can be briefly defined as the maximum utilization of resources for improving efficiency. In order to determine the efficiency or inefficiency rate of each institution, appropriate indicators must be used as comparison criteria[11]. Hospitals'